U.S. Department of Transportation
Federal Railroad Administration

SAFETEA-LU

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Overview of Act

- Affects highway, highway safety, transit, and other programs
- Authorizes and appropriates funds for programs and projects for basically FY 2005-2009
- Includes a section dedicated to rail transportation for first time

Title IX: Rail Transportation

- **High-speed Rail Corridor Development (FY 2006-2013)**
  - Authorizes $70 million/year for development
  - Authorizes $30 million/year for technology improvements
- **Capital Grants for Rail Line Relocation Projects**
  - Authorizes $350 million/year for FY 2006-2009
  - Provides financial assistance to states for local rail line relocation and improvement projects
- **Rehabilitation and Improvement Financing**
  - Expands authority for RRIF loan program
  - Increases loan limit from $3.5 billion to $35 billion
- **Grants to Alaska Railroad**
  - Authorizes funds for capital rehabilitation and improvements benefiting passenger operation

Title IX: Rail Transportation

- **Train Travel in Communities without Grade Separation**
  - Requires study of the impact of blocked highway-rail grade crossings on emergency responders
  - Requires a report within 1 year

- **Welded Rail**
  - Directs FRA to require railroads to include in their procedures for inspecting CWR track improved procedures to identify cracks in rail joint bars within 90 days
  - Instructs FRA inspectors to obtain a copy of railroads' programs for inspecting CWR
  - Requires FRA to set-up a program to review FRA data on CWR
  - Directs FRA to require railroads to increase frequency of inspections of rail joint bars in CWR, when necessary or appropriate

Title IX: Rail Transportation

- **Tank Car Safety Improvements requires FRA to:**
  - Validate a predictive model to quantify relevant dynamic forces acting on tank cars under accident conditions within 1 year
  - Develop and implement design standards for pressurized tank cars within 18 months
  - Analyze steels used in shells of pre-1989 pressure tank cars to determine impact resistance within 1 year
  - Submit a report to Congress including recommendations on how to reduce the risk of catastrophic failure of tank cars within 6 months after analysis is completed

Tank car crashworthiness

- Evaluate and determine the adequacy of non-normalized steels to resist fracture propagation below the ductile-to-brittle transition temperature and it's significance to overall risk

FRA Activities

- **Modeling**
  - Develop and validate a physics-based model to calculate dynamic forces that may be expected in train derailments
- **Laboratory Testing Program**
  - Perform material testing to determine the dynamic fracture toughness of various tank car steels
- **Risk Analysis**
  - Rank the tank cars that are perceived to be the most vulnerable to catastrophic failure

Milestones

- **Modeling**
  - Compare predicted and observed deformations in the Graniteville tank cars
  - Due October 2006

- **Laboratory Testing Program**
  - Depends on availability of material

- **Risk Analysis**
  - Level 1 – Completed
  - Level 2 – Due December 2005
  - Level 3 – Due six months after completing test program

Title IX: Rail Transportation

- **Study of Rail Transportation and Regulation**
  - Enter an arrangement with Transportation Research Board (TRB) within 180 days
  - Study the railroad transportation systems since 1980 (include the performance of railroads, the projection of demand for freight, comparison of adequate returns vs. rates and service, the future role of STB)
  - Requires submission of report within 1 year after arrangement with TRB
  - Authorizes $1 million for FY 2006 and $800,000 for FY 2007

Title V: Research and Development

- **Strategic plan for research and development**
  - Develop a 5-year strategic plan within 1 year

- **National Cooperative Freight Transportation Research Program**
  - Enter an agreement with National Academy of Science for administrative and management activities relating to governance

Other Rail Related Items

- Establishes a freight intermodal distribution pilot grant program
- Provides for deployment of magnetic levitation projects
- Authorizes funds for Operation Lifesaver
- Establishes a Gateway Rural Improvement Pilot in VT
- Amends purpose of hazardous materials "to protect against the risks to life, property, and the environment that are inherent"
- Funds earmarks for numerous rail projects

Summary

- Authorizes and appropriates many rail related opportunities and challenges
- Establishes a tank car program in cooperation with AAR Tank Car Committee to:
  - Rank tank cars that are perceived to be most vulnerable to catastrophic failure
  - Implement measures to eliminate or mitigate risk of tank car failure